

Iowa Department of Administrative Services – Human Resources Enterprise
Job Classification Description

Veterinary Epidemiologist

Definition

Serves as a state public health veterinarian and provides epidemiologic advisement on animal health and agricultural related issues; provides direct consultation to public health, healthcare providers, veterinarians, and the general public on zoonotic disease; leads investigations of zoonotic disease; serves as the liaison to private and public (state and federal agencies) animal health partners; performs related work as required.

The work examples and competencies listed below are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

Work Examples

Assists supervisor by performing such duties as instructing employees, answering questions, distributing and balancing the workload, and checking work; may make suggestions on selection, promotions, and reassignments.

Serves as a technical expert on zoonotic disease, providing consultation to the Department, especially the Deputy State Epidemiologist and the State Epidemiologist on all issues related to animal health and agriculture.

Leads zoonotic disease case and outbreak investigations by providing leadership, veterinary and epidemiologic expertise, and recommendations for prevention and control. Develops investigation tools, analyzes and interprets investigation data, and establishes case and outbreak-specific recommendations.

Designs, delivers, and evaluates zoonotic disease education and outreach to partners and the general public. Determines priority topics, engages appropriate partners, identifies and recruits participants, delivers the education and outreach materials, and evaluates the impact of the education and outreach.

Serves as a Department liaison to other state and federal agencies and to private sector partners for the purposes of planning for and responding to zoonotic disease emergencies. Writes zoonotic disease emergency response plans, conducts zoonotic disease preparedness training, participates in the Department's response structure during zoonotic disease emergencies, evaluates zoonotic disease preparedness and response needs, and develops reports.

Represents the Department on zoonotic disease issues with public and media. Provide consultation to healthcare providers, veterinarians, and the public on zoonotic disease issues.

Conducts zoonotic disease surveillance in coordination with partners. Establishes zoonotic disease surveillance data fields, determines the zoonotic disease surveillance data collection platform, analyzes and interprets zoonotic disease surveillance data, and recommends prevention and control measures based upon zoonotic disease surveillance data.

Conducts quality improvement to evaluate the effectiveness of zoonotic disease activities.

Competencies Required

Knowledge:

- Biology – Plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.
- English Language – The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Mathematics – Arithmetic, algebra, geometry, calculus, statistics, and their applications.
- Medicine and Dentistry – The information and techniques needed to diagnose and treat human injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.
- Chemistry – The chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.
- Sociology and Anthropology – Group behavior and dynamics, societal trends and influences, human migrations, ethnicity, cultures and their history and origins.
- Education and Training – Principles and methods for curriculum and training design, teaching and instruction for individuals and groups, and the measurement of training effects.

Abilities:

- Problem Sensitivity – Tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
- Deductive Reasoning – Apply general rules to specific problems to produce answers that make sense.
- Inductive Reasoning – Combine pieces of information to form general rules or conclusions.
- Oral Comprehension – Listen to and understand information and ideas presented through spoken words and sentences.
- Written Comprehension – Read and understand information and ideas presented in writing.
- Oral Expression – Communicate information and ideas in speaking so others will understand.
- Written Expression – Communicate information and ideas in writing so others will understand.
- Originality – Come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.
- Mathematical Reasoning – Choose the right mathematical methods or formulas to solve a problem.

Skills:

- Science – Using scientific rules and methods to solve problems.
- Critical Thinking – Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Complex Problem Solving – Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

- Active Learning – Understanding the implications of new information for both current and future problem-solving and decision-making.
- Reading Comprehension – Understanding written sentences and paragraphs in work related documents.
- Judgment and Decision Making – Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Writing – Communicating effectively in writing as appropriate for the needs of the audience.
- Speaking – Talking to others to convey information effectively.
- Systems Analysis – Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.
- Systems Evaluation – Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.

Minimum Qualification Requirements

Applicants must meet all of the following minimum requirements to qualify for positions in this job classification:

- 1) Licensure as a Doctor of Veterinary Medicine (DVM) in the State of Iowa; and
- 2) Graduation from an accredited college or university with a graduate degree in public health with at least two courses related to the principles and practice of epidemiology.

Effective date: 09/20 SA